Longevity technology

Do enzymes make or regenerate NMN at the body? Genes for these could have SNPs that are high wellness phenotypes, gene therapy could be a wellness drug. Although NMN only made mice live 5% longer further study might find a longevity effect, notably from cardiowellnes and perhaps youthful liver function at removing xenobiotics and reducing cancer,

Are there naturally occuring body produced chemicals that contributed to more than half of 20th century cancers? (with the idea that xenobiotics, stress, possibly EM, sedentariness and food might have caused much of the rest) SNPs about these body occuring carcinogenic chemicals could be anti-cancer gene

variations that people could optimize with genetic engineering and gene therapy. Insulin and growth factor genetics are possibilities, as is possibly sex hormone levels and SHBG (plasma fraction that gloms steroids); I think there are published systems approaches as well, like mRNA math distribution change with physiological challenges, epigenenetics, and mitochondrial number change.

Longevity chemical: It is my perception that some cytes have less than a dozen mitochondria, and other sites might have near 400; If you do gene therapy or modify the human genome to have mRNA for proteins that would otherwise be affected as to their amount from having fewer mitochondria per cyte from chronological duration effects produced at those cytes (and tissues)

that have upper third of mitochondrial number quantity does more of the previously diminishing protein get produced, thus benefitting the body and causing youthful levels of protein to exist? Some proteins travel from cyte to cyte as neighbors as well as circulate at the circulatory system, the proteins that travel outside the cyte could be especially engineering effective at sharing benefit from the gene-therapied, many-mitochondiad cytes and tissues.

Genetic engineering biochemicals to be mRNA coded or produced at the ADP makes ATP cycle, which processes 90 lbs of ADP every 24 hours looks like higher volume production.

I think the ethics and engineering of making humanly intended (mind)

physical or possibly neural activation alone, actions modify genetic expression and thus phenotype support the beneficial use of this technology. Prior to 2019 AD and I think anytime, It would have been nice and beneficial, and not that much effort if people had the ability to modify the output of their genes and voluntarily modify their phenotype from simple purposed actions. Things like skipping a day of food, drinking a gallon of water, or recieving a two hour pleasant massage could all be adressable gene switches to turn on beneficial effects while being just slightly unusual enough to omit unintentional activation. Would you like your beautiful personally appreciated hair to grow twice as fast? Get a two hour massage once every 6 months. Getting a massage, even massage at a specific body part to get

a specific gene activating phenotypic effect is a possible way to adjust pehnotype voluntarily at the individual, without medical, chemical, social, or fiscally-linked activity based actions. You can give yourself a massage, become more socially fluent and have more fun. It is highly valuable to have previously heightened cognitive ability at all persons, people, humans to higher amount, I think genetically engineering persons, humans, that is people at the germline and thus phenotype to be three, four, or five times more intelligent than I am, with the persons, people, that is humans having the ability to make their beings more intelligent from that is beneficial and more optimal.

Another possibility is a minimal amount of exercise, possibly with

different muscles switching on or off different genes, like if you prefer more responsive dopamine receptors (more fun!) then walk more. This increases the amount of mitochondria, the protein production of the cytes, and possibly the actual number of muscle cytes as well. Technologically among the things are the gene therapy or modified human genome concentrating the production of biochemicals or also proteins that can circulate, or possibly things like neuron-localized nerve growth factors produced at muscle that then increase growth of doapmine neurons. (the thighs, but only the thighs produce a chemical, that when it circulates increases a growth factor like NGF or BDNF at just dopamine neurons) So walking exercises the thighs, and that produces chemicals that cause the brain's phenotype to improve to have

more dopamine responsiveness and more dopamine. If you prefer less dopamine you could do sit-ups. wlaking is easier than sit-ups, to my perception, so people with this intentionally changeable phenotype genetic form might sort of have an automatic happiness fun physiological tenedency,although just genetically engineering people and germlines to be much happier is beneficial and I support Dave Pearce' hedonistic Imperative.

As an early 21st century longevity technology, producing more mitochondria, whether with chemicals, gene therapy, germline modification, or exercise, might increase the production of other proteins at the cytes from simply making more mitochondria, which makes more ATP

available, at all of the proteins coded at the genome. It is imaginable that just light exercise could up cytolocalized biochemicals and circulating biochemicals 20%. During 2019 AD many people found it easy and enjoyable to actually double the mass of some of their muscles, so that might double the amount of a preferred protein or circulating biochemical. Different genome product directors and switches than exercise are likely to be more beneficial and popular than exercise. Drinking a gallon of water all at once, or getting a pleasurable massage once every six months is much less effort to do, and sustain, as a goal-seeking activity at consciousness than sustained exercise.

As a technology it is possible to do gene therapy on a just one body part,

and then have growth of that part make more of the phenotypic chemical like a protein or other biochemical or chemical, to produce local effects (GFP output changes with tissue use which I think is published as increasing transcription at the utilized tissue, exercising should therefore make GFP at muscle tissue increase, and instead of GFP it could be different physiologically beneficial protein or other biochemical)

Surpisingly muscle, which coalesces to multinucleus cytes and can have its number of mitochondria heighten just with use, could be a location to produce beneficial proteins with go-everywhere-activity, although other gene directors and activators are likely to be more avidly used, like massage, skipping or eating an anomalous amount of food, or getting

a massage, even massage at a specific body part to get a specific phenotypic effect.

(I may have read that 80 year olds might have only 40% of the mitochondrial numbers as 20 somethings); this affects how much energy there is to produce new proteins, how much is produced, and possibly if they are produced at all. I think I also read that the number of mitochondria, which goes with the amount of)

I read ATP might travel on actin filaments, somehow, even though ATP is an eentsy molecule. It is plausible that tubulin also effects ATP transport. If actin or also tubulin transport of ATP is actual, then **drugs or genes that modify the ability of actin to transport ATP could be wellness**

drugs and possibly longevity drugs, **or even treatment of illness drugs.** Also as a possible wellness longevity drug or genetics is the effects on the actual location arrangement and network of the actin or also tubulin that transports the ATP. Multilane highways or dendritic branches? Concentrated depots and paths, or partially populated walkways? There is a possibility that **a computer science approach to optimizing the mathematical network form of actin or also tubulin transport of ATP could benefit humans** at the cytological level with drugs or genes that reprogram actin or also tubulin based transport to optimize human well being. I perceive I have heard about research on what actin and tubulin goes where during meiosis and why, so perhaps some of those techniques

and research could benefit the technologization of actin and tubulin engineering for wellness and longevity.

I read about some chemical in Scientific american that is sometimes described as “exercise in a pill”; exercise increases the number of mitochondria at muscles, perhaps “exercise in a pill” at the circulatory system reaches more cyte types, even neurons and also tissue types and increases the number of mitochondria at them, increasing wellnes and possibly heightening lifespan from removing nonoptimal effects at linked dynamic systems.

Another thing that increases the number of mitochondria is branched chain amino acids, “Branched-chain amino acid (BCAA) supplementation

increased mitochondrial biogenesis in skeletal muscle [4]. BCAAs are 3 of the 9 essential amino acids required for humans.” [not made at humans though]

Genetically engineering food crops to make BCAAs could have quantitative measurable wellness effects, and just possibly from more mitochondria, beneficial longevity effects. Soybeans, wheat, legumes all contribute to protein sources during 2019 AD, and these nd other plants could be engineered to make BCAA.

Developing a plant-based milk that tastes more delicious to the majority of humans than dairy milk would be a valuable ethical vegetarian technology. Among Europeans and Americans milk, which could be technologically improved to be better-

than-dairy-milk plant based milk, provides much protein to many people. Genetically engineering plant based milk to have BCAA, possibly BCAA optimized to generate more mitochnodria is beneficial.

Technology that enhances vegetarian milk: Are there any good tasting surfactants? that would make the little globs customizable in size for flavor adjustment (improvement).

Can you put veggie milkpowder as a thin layer through an embosser with the resolution, or higher, of a holographic decalmaker?
Microfeatures at blobs eentsier than a wave of light could then be used to technologically improve the milk product as solvated globs; Also I have read about superhydrophilic and superhydrophobic surfaces, teeny

spires (hydrophobic) or angled sided spaces that look like ingots (hydrophilic), it could be that embossing vegetarian milk powder to make hydrophilic or hydrophobic features could enhance flavor. Also there is customizing globs to physical tongue receptor size for an optimal fit. Uncomplex embossing of a powder could be ultra-fiscally favored. Ihave seen candies made of sugar that have a hologram embossed on them, so lightwave feature size at carbohydrates is a technology that has existed since the 20th century.

.5B GSK:
I perceive that GSK may have (or may not) have links to companies like nestle; could cocoa, and possibly thus chocolate, be wavelength of light feature size embossed to enhance flavor?

Are there any naturally occuring amino acids or peptides that activate the taste receptors that activate when milk tastes good; this is completely different than MSG (monosodium glutamate) in milk, but the technology of an amino acid or eentsy peptide that enhances the flavor of veggie milk could be possible.

school lunch veggie milk
It seems like things like vegetarian nut or soy milk could be cheaper to produce than dairy milk. I think it is possible to develop the vegetrarian milk flavor until it is preferred over diry milk among most people. It is possible that more people, throughout their lives, would like an utilize vegetarian milks if they received them at school lunches.
It might even be possible to use

vegetarian milk to cause people to be weller in different ways. If the serving size of vegetarian milk is 10 Oz, as compared with the previous 8 Oz at dairy milk at identical calories, then people might drink more fluid at school lunch. Drinking more fluid at school lunch causes a population effect of eating fewer calories at the rest of the food. Then noting that at 2019 AD, research supported that vegetarians had less heart disease, cancer, diabetes, and weighed less with a better BMI than the rest of the population, the school administrators could say, “there’s nothing wrong with our food, but it’s awesome students are drinking nut/soy/oat milk and eating less of the other items and more vegetable sorced food instead” So the people at school get more ounces of milk, they are, as a population at least slightly wellness

heightened, and the school district spends less on the milk. That all combines to support vegetarian milks at school lunches.

MWI, that is Many Worlds Interpretation of physics: thinking of ways to cause a larger number of MWI universes to be generated from something going right, that a person, that is a human likes: The amount of quantum states produced from a proton (protons have their own quantum effects, among them tunneling) is, I think, larger than that of af a neutron

Note: about protons or neutrons having different numbers of quantum states, and that they each generate quantum state changes at different amount for each unit of chronological moments: I think protons have more

quantum states as an area with t as a dimension, although it could be otherwise. Thinking about the quantum effects of neutrons (I am thinking about neutrons taht are a part of atoms): if a neutron (just one as part of an entire atom) is changing a chemical rection in a flask with the isotope effect it may or may not be having a quantum mechanical effect at a multitrillion atoms simultaneously at chemical system that is some chemicals in some water in a flask.

That the isotope effect of one (part of an atom thus nondecaying) neutron, which should have at least some analog effect on all the actual atoms at the chemical sample if analog, functions at a distance (at an aqueous chemical system it could be nm, Cm or Km); the analog possibility comes from what seems like an analog

nature of things like circles and various math of topology that seems like they could be having an effect at a 3d chemical system; The thing is that I perceive a physicist might say, “even though you can observe it into a circle, or a sphere, or even that the sides of the container are changing (however minutely) to produce either space or time analog-like things, it is all describeable with a quantum wave function and quantum equation, so prior to 2019 AD observations that support quantum theory support that it is actually just a quantized system, the neutrons are not having an analog effect when one neutron produces an isotope effect on an entire flask with quadrillions of atoms at a flask of aqueous chemicals”.

That a neutron being turned into a proton causes the number of quantum

states possible, as well as generateable, per unit of chonologically measured moments, suggests that making neutrons into protons could be a technologizable way to purposefully make a larger number of MWI universes when a sentience, like a person, that is a human likes what is going on.

When a neutron is turned into a proton, that proton often attracts an electron, (does the casimir effect preclude the possibility of naked protons staying solitary?) which then do electron and photon quantum things, numerous of which are described at peer reviewed published material as being quantum effect actions, each quantum event with an MWI branch universe 92019 AD theory); converting a neutron to a proton then causes a much larger

number of MWI branches to be generated, for the theoretical duration of the universe. Although I am not yet educated sufficiently able to use aleph numbers to do calculations, if the universe happens to be chronologiclly nonfinite then the number of MWI universes generated from one neutron being converted to one proton is a nonfinite number, and further, that nonfinite number has many many MWI branches (I perceive I have read that human researchers might have different scientifically supported ideas about whether MWI branches are finite or nonfinite in quantity).

Thinking about a new proton coming from a neutron: a new proton at a chronologically nonterminating universe would have a nonfinite number of MWI branches though; or

perhaps could, I read about people who think cooling all atoms to their quantum ground state is a spontaneous actual process at the universe; although MWI suggests that things like time crystals and the delayed quantum choice eraser could effect quantum-capability of atoms retrocausally or cyclically at some amount of the MWI universes; I have heard of these things, so the MWI universe I am in might be entropically nonmonolithic

A technology that utilizes the difference between a proton and a neutron to cause more MWI branches where a human things things are pleasantly going the way they like. I like Serina, so when I send her a text, and she replies I think my life is going well and I am particularly enthused about MWI branches arising from a

universe where Serina texts me, I then press “make proton” on my phone, and the phone makes some protons out of neutrons. That generates a nonfinite (proton at nonchronologically finite universe version) number of universes that branch from one where Serina communicates with me. I could even press on “make lots of protons” if Serina says something like, “I like you” or “let’s meet”.

AI and software developing MWI technologies: With MWI technologies it is my perception it is endless quadrillion of times better to write them immediately rather than wait a moment to write them as a vast plurality of MWI branch universes will potentially benefit from new, accurate, actual, technology producing MWI content; that suggests that AI (artificial intelligence) writing,

communicating, or doing experiments could then validate and quantify the “research on the MWI should be accomplished immediately as it affects endless quadrillions of universes differently if you delay 1 millisecond” way of looking at the MWI. A human that builds an AI that figures out new things about the MWI, or even just develops the math and technology space, a few trillion times faster than a thinking writing human is a thing that could be of value from the perspective of a person like me that values making happier more optimal, Dave Pearce’ headonistic imperative actualized universes. (AI produces MWI research and technology a trillion times faster than me) During 2019 a 4Ghz processor would do 4 billion computations a second, and 250 seconds would be a trillion computations, so an AI doing a few

trillion more MWI research things and technology items than I would in an hour is plausible; a few sequential instructions at a parallel 4Ghz AI compared with a few minutes of human thought.

Immunizing against a million topologies; screen antibodies to things like “a torus of alpha helices” or a “square of beta sheets”, or “something made of protein twice as wide as it is long” at human tissue culture. This edits the amount and kind of chemicals and biochemicals shared between cytes. Then find out what these categories, and mathematically developable forms (if it kind of works on one topology, then they can find logical math extensions from that topological shape; immunizing against alpha helix torus is 20% effective at heightening

organism, like a human, that is a person’s longevity, so the math suggests: vary diameters, immunize against an “8” and an “88”, and immunize against a tetrahedron made with a torus on each side, and others) of them to find the topological antibodies that cause human tissue culture arrays to be weller and have greater longevity; (immunize against many to mid AMU rod looking groups, curlies, heaps of alpha helices, piles of beta sheets)

Immunizing that prevents senescence could be the effect of screening topological libraries of antibodies. Notably research on senolytics apparently supports this. Senolytics terminate senescent cytes; as a result the senescent cytes cease to export chemicals and biochemicals to their between-cyte environment as well as

the circulatory system. Those senescent cyte produced chemicals caused unwellness at other previously well and non senescent cytes. Terminating the senescent cytes causes the well cytes to have things continue to go well, and I think I read that mice that get senolytic therapy are healthier, perhaps phenotypically younger, and have longer lifespans, all from eliminating the chemicals the senescent cytes made. So, could you immunize a lab mammal and then a human, that is a person, against the entire library of chemicals and biochemicals that the senescent cytes produce; such an immunization could have the effect of a senolytic drug as it mops up the nonoptimal chemicals.

So, supporting the screening of topological antibodies, senolytics' effectiveness and conceptual form

apparently supports the idea that there is a whole bunch of things, and that if you treat them as a group, you can get an overall bulk effect, even though the bulk effect could contain optimal and nonoptimal chemical effects simultaneously.

Some different bulk effects at the human body that I think are published as causing benefit are things kind of like: more mitochondria causes more protein production, and more mitochondria thus produce greater wellness and youthfulness. Another bulk effect is putting more genes, of any kind, on histones, I think (possibly) causes greater longevity and fidelity of proteins produced.

As a bulk effect, immunizing against topologies could produce beneficial effects like wellness and longevity at

the entire body. The thing is to make a lot of them and screen the library to find the ones where the average and distribution of the blended bulk effect is quantitatively and qualitatively measured as much better for the human than an absence of the topological immunization.

Going with this technology of Immunizing against extensible classifications (like topology) could be immunizing against electric charge of an entire protein. Immunize against everything with -.499 to -5.00 charge and a thousand others from +4.99 to -4.99). this diminishes the amount of the proteins circulating, or zapping those cytes with these charges of protein at their surface; this would have a bulk effect, and then the bulk effects of a few thousand variations, or a few million variations, are listed

at a computer with the immunization that produces the greatest beneficial bulk effect at the top of the list.

Screening topological and protein molecular electronegativity: Make a human tissue culture of neuron, cardiac and other human cytes, although multiwell plates already exist, you could use IC production technology to make a 1000 times 1000 grid, which is one million human tissue culture samples per screenable plate. The thing is that if you screen a 1000 times 1000 times physical array you have characterized the effect of more than a million different antibodies on the wellness and longevity of things like neuron and cardiac and other tissue culture, which could be predictive of wellness and longevity effects at those tissues and also the entire organism.

Notably increasing wellness and longevity at the entire organism is the resulting beneficial drug from screening vaccines to topologies at a big array. These new wellness longevity drugs are produced when topologies and electron negativities of proteins are found that have beneficial bulk of physiology effects.

I read that BCAA cause more mitochondria to be at cytes. A person with abilities at planning and creating food, might be able to make a new popular food based completely around BCAAs, possibly a completely new BCAA, with a different amino acid sequence that tastes better than 2019 A.D. BCAA (Noting the mitochondrial amount going up I think I read, has higher wellness (and possibly longevity) effects.

I perceive that caffeine is a 2019 AD popular drug, notably at beverages.

So, can you attach a biguanide (metformin-like molecule) to caffeine, which alread tastes aversive, to make a longevity version of caffeine that is a stimulant that makes people live longer and have less heart disease and less cancer. Lilacs make biguanides, tea makes caffeine, so both at one gene engineered plant could be produced. Along with the rest of the world China might go for longevity tea from a GMO crop.

If you chelate beneficial things, even like a biguanide (metformin-like effects) does the taste become much milder? EDTA seems to be mild flavor. Are there any naturally occruing plant products that are

chelation agents? Then you could blenderize and fractionate the source plant and soak the thing to be chelated in the soultion that had the naturally occuring chelator concentrated.

Although ECGC is already at tea, perhaps it could be engineered into coffee.

Curcurmin comes from a plant in the ginger family, perhaps ginger could be engineered to be good for people and make curcurmin. A mild flavored more massive Ginger root with curcurmin might replace the potato

Tea bred or engineered to have 10x as much ECGC, noting tea already produces ECGC.